Monitoring Data Record

Project Title: R-2809B (Site 1) COE Action ID: 199601836
Stream Name: UT to Richland Creek DWQ Numbers: 010550
City, County and other Location Information: Wake Forest Bypass, Wake Co. (Left of Y2 Sta. 10+40 to Sta. 11+25)
Date Construction Completed: April 2006 Monitoring Quarter: (2) of 4
Ecoregion: 8 digit HUC unit: 03020201
USGS Quad Name and Coordinates:
Rosgen Classification:
Length of Project: 384' Urban or Rural: Urban Watershed Size:
Monitoring DATA collected by: M. Green Date: 8/22/06
Applicant Information:
Name: NCDOT Roadside Environmental Unit
Address: 1425 Rock Quarry Rd. Raleigh, NC 27610
Telephone Number: (919) 861-3772 Email address:
Consultant Information:
Name:
Address:
Telephone Number: Email address:
Project Status: Complete

Monitoring Level required by COE and DWQ (404 permit/ 401 Cert.): Level (1) ~~2~~ ~~3~~
Monitoring Level 1 requires completion of *Section 1, Section 2 and Section 3*

Permit States: The permittee will visually monitor the vegetative plantings on all mitigation streambanks to access and insure complete stabilization of the mitigation stream segments. This monitoring will include adequate visual monitoring of planted vegetation for a minimum of one year after final planting, and appropriate remedial actions (e.g., replanting, streambank grading, ect.). If within any monitoring year, bank stabilization is not acceptable as determined by the Corps of Engineers, and remedial action required by the Corps of Engineers is performed, the two year monitoring of the affected portions of the stream will begin again.

Section 1. PHOTO REFERENCE SITES

Total number of reference photo locations at this site:
4 photo point locations - 2 photos at each location
Dates reference photos have been taken at this site: 5/10/06, 8/22/06
Individual from whom additional photos can be obtained (name, address, phone):

Other Information relative to site photo reference:

If required to complete Level 3 monitoring only stop here; otherwise,

Section 2. PLANT SURVIVAL
Attach plan sheet indicating reference photos.

Identify specific problem areas (missing, stressed, damaged or dead plantings):

A bankfull event from Tropical Storm Alberto has washed away some of the planted vegetation. The storm dropped approximately 7 inches of rain in Wake County.

Estimated causes, and proposed/required remedial action:
Supplemental plantings will be installed during the next planting window.

ADDITIONAL COMMENTS: Live stakes and bareroot seedlings noted on the streambank and in the floodplain consisted of black willow, silky dogwood, green ash, swamp chestnut oak, willow oak, and laurel oak.

If required to complete Level 1 and Level 2 monitoring only stop here; otherwise, complete section 3.

Section 3. CHANNEL STABILITY

Visual Inspection: The entire stream project as well as each in-stream structure and bank stabilization/revetment structure must be evaluated and problems addressed.

Report on the visual inspection of channel stability. Physical measurements of channel stability/morphology will not be required. Include a discussion of any deviations from as-built and an evaluation of the significance of these deviations and whether they are indicative of a stabilizing or destabilizing situation.

Since the last monitoring visit in May the stream has sustained a bankfull event from Tropical Storm Alberto in June which dropped approximately 7 inches of rain in Wake County. Some bank erosion and erosion behind some of the cross vane arms have taken place as seen in the photos. Point bars have developed where the banks have eroded helping the stability of the stream. Some of the coir fiber matting that was washed downstream has been restaked. The overall stability of the stream is in fair condition for the 2nd Quarter of monitoring. NCDOT will continue to monitor this stream.

Date Inspected	Station Number	Station Number	Station Number	Station Number	Station Number
Structure Type	Photo 1	Photo 3	Photo 5	Photo 6	
Is water piping through or around structure?			Water piping around left arm of cross vane		
Head cut or down cut present?					
Bank or scour erosion present?	Erosion on left bank	Erosion on right bank	Erosion on right bank	Erosion on left bank	
Other problems noted?		Right arm of cross vane has some slight erosion	Right and left arms of cross vane have eroded	Erosion behind left arm of cross vane	

NOTE: Attach separate narrative sheets to each monitoring report describing/discussing the overall monitoring results. Include the identification of specific problem areas/channel failures, estimated cause and proposed/required remedial action. This should include a brief discussion of any parameter that has changed significantly from as-built.

Wake Forest Bypass

Photo 1 (Upstream)

Photo 2 (Downstream)

Photo 3 (Upstream)

Photo 4 (Downstream)

Photo 5 (Upstream)

Photo 6 (Downstream)

Wake Forest Bypass

Photo 7 (Upstream)

Photo 8 (Downstream)